

## II. Listing of Claims

The following list of the claims replaces all prior versions and lists of the claims in this application.

1 -24. (Canceled)

25. (Currently Amended) A method for introducing one or more substances into an intervertebral disc having a nucleus, the method comprising:

positioning a distal portion of a catheter device in the disc nucleus;

anchoring the distal portion of the catheter device in the nucleus after it has been positioned to maintain the distal portion in the disc nucleus;

A method as in claim 1, further comprising, causing the patient to assume a position in which substantial spinal pain is experienced;

introducing at least one substance into the disc nucleus through the catheter device while the distal portion remains anchored in the disc nucleus, wherein the at least one substance includes at least one anesthetic or analgesic; and

allowing the patient to move so that the distal end of the catheter would be pulled from the nucleus if it weren't anchored.

26. (Withdrawn) A method as in claim 25, further comprising:

positioning a distal portion of a second catheter device in a second intervertebral disc;

anchoring the distal portion of the second catheter device to maintain the distal portion in the second disc; and

introducing at least one substance into the second disc through the second catheter device.

27. (Withdrawn) A method as in claim 26, further comprising,

causing the patient to assume a position in which substantial spinal pain is experienced, wherein the at least one substance includes at least one anesthetic or analgesic.

28. (Withdrawn) A method as in claim 27, further comprising determining which of the discs into which the at least one substance was introduced is causing the patient's spinal pain.

29. (Original) A method as in claim 25, further comprising performing a discography procedure on the intervertebral disc before positioning the distal portion of the catheter device in the disc.

30. (Original) A method as in claim 25, further comprising performing a discography procedure on the intervertebral disc after introducing the at least one anesthetic or analgesic.

31. (Currently Amended) A method for introducing one or more substances into an intervertebral disc having a nucleus, the method comprising:

positioning a distal portion of a catheter device in the disc nucleus;

anchoring the distal portion of the catheter device in the nucleus after it has been positioned to maintain the distal portion in the disc nucleus;

introducing at least one substance into the disc nucleus through the catheter device while the distal portion remains anchored in the disc nucleus ~~A method as in claim 1,~~ wherein the at least one substance is introduced automatically over a period of time; and

allowing the patient to move so that the distal end of the catheter would be pulled from the nucleus if it weren't anchored.

32. (Original) A method as in claim 31, further comprising recording one or more patient inputs describing back pain experienced by the patient.

33. (Currently Amended) A method for introducing one or more substances into an intervertebral disc having a nucleus, the method comprising:

positioning a distal portion of a catheter device in the disc nucleus;

anchoring the distal portion of the catheter device in the nucleus after it has been positioned to maintain the distal portion in the disc nucleus;

introducing at least one substance into the disc nucleus through the catheter device while the distal portion remains anchored in the disc nucleus;

allowing the patient to move so that the distal end of the catheter would be pulled from the nucleus if it weren't anchored;

~~A method as in claim 1, further comprising:~~

leaving the catheter device in position with the distal portion in the disc; and  
administering the at least one substance over time to provide treatment of spinal pain.

34. (Withdrawn) A method as in claim 33, wherein at least one substance is administered over time via a subcutaneous injection port or implanted pump, the method further comprising coupling the catheter device to the subcutaneous injection port or implanted pump.

35. (Previously Presented) A method for identifying an intervertebral disc that is causing pain, the method comprising:

positioning a distal portion of a catheter device in a nucleus of a disc of a patient;  
anchoring the distal portion of the catheter device in the disc nucleus after it has been positioned to maintain the distal portion in the disc nucleus;

instructing the patient to assume a position in which substantial spinal pain is experienced, wherein the patient assumes a position which would pull the distal end of the catheter from the disc nucleus if it weren't anchored; and

introducing at least one analgesic or anesthetic into the disc through the catheter after the patient has assumed the position, wherein the patient observes whether the analgesic or anesthetic has reduced the pain experienced.

36. (Original) A method as in claim 35, wherein positioning the distal portion comprises passing the catheter device through a lumen of an introducer device.

37. (Withdrawn) A method as in claim 36, wherein positioning the catheter device comprises:

passing the catheter device through the lumen of the introducer device over a pointed stylet;

piercing through an annulus fibrosis of the disc using the stylet; and  
withdrawing the stylet from the catheter device.

38. (Withdrawn) A method as in claim 36, wherein positioning the distal portion further comprises piercing through the annulus fibrosis into the disc with a tapered distal end of the catheter device.

39. (Original) A method as in claim 38, wherein positioning the distal portion further comprises passing the catheter device over a guidewire.

40. (Original) A method as in claim 36, wherein a distal end of the introducer device is advanced to a position within the disc before the catheter device is passed through the introducer device.

41. (Original) A method as in claim 40, wherein positioning the distal portion further comprises passing the catheter device over a guidewire.

42. (Original) A method as in claim 41, wherein the catheter device is passed through the introducer device over a guidewire.

43. (Withdrawn) A method as in claim 41, wherein the introducer device is removed over the guidewire before the catheter device is passed over the guidewire.

44. (Withdrawn) A method as in claim 35, wherein positioning the distal portion comprises visualizing at least one radiopaque marker or material at or near the distal portion to assess the location of the distal portion.

45. (Original) A method as in claim 35, wherein anchoring comprises deploying at least one anchoring member of the catheter device.

46. (Original) A method as in claim 45, wherein the at least one anchoring member is deployed on or near the distal portion of the catheter device.

47. (Original) A method as in claim 46, wherein anchoring comprises inflating at least a first expandable member in the disc.

48. (Withdrawn) A method as in claim 47, further comprising inflating at least a second expandable member adjacent an outer surface of the disc.

49. (Original) A method as in claim 35, wherein anchoring comprises deploying at least one mechanism along the distal portion of the catheter device to increase the effective cross-sectional diameter of the catheter at one or more locations.

50. (Withdrawn) A method as in claim 35, wherein anchoring comprises causing at least part of the distal portion to change from a substantially straight shape to a substantially curved or geometric shape.

51. (Withdrawn) A method as in claim 35, wherein anchoring comprises attaching part of the distal portion to an annulus fibrosis of the disc.

52. (Canceled).

53. (Previously presented) A method as in claim 35, further comprising introducing at least one substance comprises introducing a placebo substance into the disc.

54-55. (Canceled).

56. (Withdrawn) A method as in claim 35, further comprising:  
positioning a distal portion of a second catheter device in a second intervertebral disc;  
anchoring the distal portion of the second catheter device to maintain the distal portion in the second disc; and  
introducing at least one analgesic or anesthetic into the second disc through the second catheter device.

57. (Withdrawn) A method as in claim 56, further comprising, before or after introducing the at least one analgesic or anesthetic into the second disc, causing the patient to assume a position in which substantial spinal pain is experienced, wherein the patient observes where the position causes pain the second disc.

58. (Withdrawn) A method as in claim 57, further comprising determining which of the discs into which the at least one substance was introduced is causing the patient's spinal pain.

59. (Original) A method as in claim 35, further comprising performing a discography procedure on the intervertebral disc.

60. (Previously presented) A method as in claim 35, further comprising: leaving the catheter device in position with the distal portion in the disc; and administering at least one treatment substance over time to provide treatment of spinal pain.

61. (Withdrawn) A method as in claim 60, wherein at least one substance is administered over time via a subcutaneous injection port or implanted pump, the method further comprising coupling the catheter device to the subcutaneous injection port or implanted pump.

62. (Original) A method as in claim 35, wherein the at least one substance is introduced automatically over a period of time.

63. (Previously presented) A method as in claim 35, further comprising recording one or more patient inputs describing back pain experienced by the patient.

64-130. (Canceled).

131. (Previously presented) A method as in claim 35, wherein the patient is instructed to perform a task.

132. (Previously presented) A method as in claim 131, wherein the patient is instructed to bend over.